Module 8
INREV Performance Measurement
Whitepaper – 17 March 2015

Contents

Compliance framework

Compliance objective
Managers should disclose all relevant INREV performance measures as a component of their annual and interim reports to investors.

Self-assessment process
Managers should evaluate the level of compliance with INREV requirements and recommendations, using the INREV compliance checklist.

Disclosure
Managers should include all information corresponding to applicable INREV performance measure requirements and recommendations in their annual and interim reports.

Oversight and assurance
Management and non-executive officers should review the adequacy of the compliance disclosure to investors summarising the level of compliance with performance measure requirements. Auditors could give negative assurance on the degree to which INREV performance measure requirements and recommendations are complied with.

Introduction

The purpose of this Performance Measurement Module forming part of the INREV Guidelines is to provide support to managers when computing and reporting the performance measures of a vehicle. In addition to the guidelines, this module includes detailed computation formulae as well as examples to facilitate implementation. The guidelines aim to increase consistency in the reporting of performance to investors.

The standardisation will also improve the relevance of indices, such as the INREV Index, which are potentially used as benchmarks. Benchmarking the performance of a vehicle can add additional light on a vehicle's performance. The benchmark should contain vehicles with similar investment mandates, objectives or strategies.

The guidelines have been developed as a consequence of increased demand for standardised performance measures for non-listed real estate vehicles. In developing the guidelines notice has been paid to the Global Investment Performance Standards ("GIPS") issued by the CFA Institute and the NCREIF PREA Reporting Standards. Although the frameworks are different, the intention is to align the approaches and avoid conflicts in the methodologies. The Performance Measurement Module has also been developed in light of existing practice in the European non-listed real estate fund industry. In this context, references to the relevant key performance indicators (KPI's) disclosed in the INREV Standard Data Delivery Sheet (SDDS) have been embedded into the guidelines, when relevant.

Performance measures and the level of disclosures may vary depending on the style of the vehicle (as determined in the INREV Fund Style Classification paper). Indeed, the level of discretion of a fund manager in determining the cash flows of a vehicle and investment restrictions vary significantly depending on the vehicle type. Some performance measures may not be appropriate for some vehicles. For instance, fund managers of closed ended vehicles have discretion over capital calls and distributions, while fund managers of open ended vehicles need to accommodate new issues and redemptions which may interfere with the portfolio strategy. In this context, money weighted returns are more relevant for closed ended vehicles whereas time weighted returns are more relevant for open ended vehicles.

These guidelines have primarily been designed for direct property vehicles.

Principles

P.21 **Performance measures of a vehicle should present fairly the performance of a vehicle. They should be reliable, consistently computed and presented to enable investors to understand and benchmark the performance of the vehicle.**

P.22. **Performance measurement should reflect the performance of the vehicle in the context of its style, type, structure and strategy.**

Guidelines

FD.27 **Managers should disclose conflicts between the vehicle documentation and this module and performance measures could be provided side by side.**

PM.1 **Managers should disclose the computed performance measures and methodology used. If the Fund Manager choses to use a formula not in line with the proposed methodology set out in this module, this should be fully disclosed and explained.**
Presentation of the vehicle level performance should be accompanied by adequate disclosures. The purposes of such disclosures are to provide present and potential investors with a precise and complete picture of the vehicle's historic performance.

PM.2 **Performance measures should be calculated at a minimum at the same frequency as the valuation frequency of the underlying real estate portfolio**.
Periods where a vehicle does not perform valuations can still be a data point as long a NAV is determined. For instance a vehicle may provide quarterly NAVs, but only annual property valuations. In interim periods the NAV would reflect all changes of the balance sheet while holding the value of the property portfolio constant.

	Open ended vehicles	Closed ended vehicles
Performance measures described below are established at vehicle level. Managers are free to disclose additional measures such as property level performance measures. Time weighted returns are the preferred performance measure to use when a manager does not have control over the cash flows of the investment. This is typically seen in open ended vehicles and non-discretionary single client account portfolios. The Modified-Dietz Method is the used throughout the financial industry.	✓	✓

	Open ended vehicles	Closed ended vehicles

In closed ended vehicles, the manager has control over the drawdown of capital into the vehicle and the eventual distribution of capital and profits back to investors. Therefore, TWR may not be the best way to present performance, but in order for performance to be comparable to various market indices available TWRs is a requirement for closed ended vehicles.

PM.3 **A total return on a time weighted basis should be disclosed in the annual report. This measure should be provided on a one, three, five and ten year performance on an annualized basis.**

A total return is computed as follows:

$$\frac{\mathrm{NAV_t} - \mathrm{NAV_{(t-1)}} - \mathrm{contributions} + \mathrm{redemptions} + \mathrm{distributions}}{\mathrm{NAV_{(t-1)}} + \mathrm{TwdC} - \mathrm{TwdR} - \mathrm{TwdD}}$$

TwdC = Time weighted (daily) contributions
TwdR = Time weighted (daily) redemptions
TwdD = Time weighted (daily) distributions

The total return measures the performance over a specific period and does not include projections to the end of the vehicles life.

Cumulative returns are computed as follows:

$$r_P = [(1 + r_1) * (1 + r_2) * (1 + r_3) * \ldots \ldots * (1 + r_n)] - 1$$

r_p = Return for the measurement period p
$r_1 \ldots r_n$ = Quarterly return for period 1 through n

Annualisation is computed as follows:

Where there is a return that is greater than 1 year, but not a full year period (e.g. one year and two months)

$$AR_p = \left[(1 + R_p)^{(\frac{365}{DHP})}\right] - 1$$

For full years the formula is as follows

$$AR_p = \left[(1 + R_p)^{(\frac{1}{y})}\right] - 1$$

AR_p = Annualised return for the measurement period p
R_p = Return for the measurement period p (non-annualised)
DHP = number of days in the measurement period
y = number of full year periods

	Open ended vehicles	Closed ended vehicles
PM.4 (open end) **Where a vehicle has an explicit income return strategy, a income return should be disclosed. This measure should be provided on a one, three, five and ten year average performance on an annualized basis.** Open end Vehicles Income Return is computed as follows: $\frac{\sum \text{Distributions}}{\text{NAV}_{(t-1)} + \text{TwdC} - \text{TwdR} - \text{TwdD}}$ TwdC = Time weighted (daily) contributions for the measurement period TwdR = Time weighted (daily) redemptions for the measurement period TwdD = Time weighted (daily) distributions for the measurement period Distributions include dividends and interests paid during the period and do not include return on capital. SDDS references: Distribution yield (7.4)	✓	
PM.4 (closed end) **Where a vehicle has an explicit income return strategy, a distribution yield should be disclosed. This measure should be provided on a one, three, five and ten year average performance on an annualized basis.** Closed end Vehicles Distribution yield is computed as follows: $\frac{\sum \text{Distributions}}{\text{TwdC} + \text{TwdR}}$ TwdC = Time weighted (daily) contributions for the measurement period TwdR = Time weighted (daily) redemptions for the measurement period Distributions include dividends and interests paid during the period and do not include return on capital, when relevant for the vehicle. SDDS references: Distribution yield (7.4)		✓
Returns should be calculated on a money weighted basis where weight is put on the size and timing of the cash flows reflecting the manager's control over in- and out-flows of the vehicles. PM.5 **Since Inception Internal Rate of Return ("SI-IRR") should be disclosed.** SI-IRR is computed as follows: $-f_0 + \frac{f_1}{1 + \text{IRR}} + \frac{f_2}{(1 + \text{IRR})^2} + \frac{f_3}{(1 + \text{IRR})^3} + .. + \frac{f_n}{(1 + \text{IRR})^n} = 0$ $f_0 ... f_n$ = cash flow for the period 0 through n IRR = Internal Rate of Return This is otherwise known as a money-weighted return. SDDS references: IRR since inception net (7.2)		✓

	Open ended vehicles	Closed ended vehicles
PM.6 **An Investment Multiple or Total Value to Paid-in Capital Multiple ("TVPI") should be disclosed.** TVPI is computed as follows: $\frac{TV}{PIC}$ TV (Total value) = Sum of residual vehicle net assets (NAV) plus aggregate vehicle distributions PIC (Paid in capital) = cumulative capital contributed to the vehicle <u>SDDS references:</u> Current equity multiple (net) (7.6)		✓
PM.7 **Realisation Multiple or Cumulative Distributions to Paid-in Capital multiple ("DPI") should be disclosed.** DPI is computed as follows: $\frac{D}{PIC}$ D = Distributions PIC (Paid in capital) = cumulative capital contributed to the vehicle <u>SDDS references:</u> Gross equity multiple of fund realised (7.7)		✓
PM.8 **An Unrealised Multiple or Residual Value to Paid-in Capital Multiple ("RVPI") should be disclosed.** RVPI is computed as follows: $\frac{RV}{PIC}$ where, RV (Residual value) = Net asset value (NAV) of the vehicle PIC (Paid in capital) = cumulative capital contributed to the vehicle		✓
PM.9 **The following items should be disclosed alongside the performance measures** ○ **As to what date the performance measure is presented** ○ **Currency used to express performance measure** ○ **If the returns are net, What fees have been deducting to reach the net performance** ○ **Applied accounting standards** ○ **If applicable, how performance fees have been accounted for**	✓	✓

	Open ended vehicles	Closed ended vehicles
PM.10 **Benchmarks with the same vintage year or inception year should be disclosed if available and meaningful.** Given the limited universe of vehicles in several markets, it may not be appropriate to use available main- or sub-real estate vehicle indices as benchmarks. A manager should take reasonable care not to apply benchmarks where the manager or vehicle in question accounts for a significant share of the benchmarking universe. When no appropriate benchmark exists, this must be disclosed. Where there is a difference between the performance objective and the benchmark, the objective may be used as a primary reference point as long as clearly disclosed		✓
PM.11 **Where a composite and a benchmark are disclosed, they should be described.**	✓	✓
PM.12 **Vehicles should disclose their vintage year.**		✓
PM.13 **Where a composite is presented a composite description must be disclosed.**	✓	✓
PM.14 **The time period and frequency of cash flows used in the calculation should be disclosed.**		✓

Considerations

The following considerations and methodologies are to be used when determining performance measures:

Performance measurement computation – considerations

Unitised basis versus NAV basis

In some countries, the performance of vehicles may be reported at a unit level. The guidelines have been developed on the basis that performance has been determined on aggregate NAV and cash flow basis.

GAAP

The methodologies described below assume that components of measures are determined in accordance with Module 4 - INREV NAV, which is determined based on IFRS financial statements. Where this is not possible reference should be made to IFRS or local GAAP.

Dates of cash flows

Dates used for performance calculations should be based on cash flows between investors and the vehicle at the date as determined for accounting purposes. As a minimum, monthly and annual cash flows must be used however it is now common to use quarterly and daily cash flows where adoption would be encouraged, especially for open ended vehicles.

Open ended vehicles are subject to a potential constant in- and out-flow of capital. To accommodate for the large flows of capital, it can be rolled up periodically, ideally on a monthly basis to the end of each month.

Concerning distributions for unitised vehicles the declared date should be used.

Closed ended vehicles should apply the dates where cash flows are called or distributed to investors. The date should reflect the effective date for capital calls where the capital should be paid in and for distributions where the capital was paid by the vehicle.

Valuation of properties

Property should be valued in accordance with guidelines defined in Module 3 – Property Valuation.

Fees

Vehicle level performance measures may be calculated on three main levels:

1. gross of all management fees,
2. net of management fees, but gross of performance fees (carried interest); or
3. net of both management and performance fees.

Therefore, performance measures are computed net of all fees and any materialised carried interest (or any other kind of performance fee) and forecasted future (provisions for) carried interest payments. Even though not required, performance measures may also be computed gross of management fees and carried interest payments.

When fees are charged to investors outside of the vehicle, performance measures should include these fees as if the fees had been billed directly to/inside the vehicle.

Currencies

Default performance should always be calculated in the vehicle denominated currency in order to reflect the true performance of the vehicle.

Performance measurement computation – composite constructions

To illustrate the combined performance of multiple vehicles, composite performance can be presented which combines the performance of each vehicle in a standardised way over time.

Grouping criteria

To ensure fair representation of composite performance, vehicles included in the same composite must share one or more common attribute.

Composites should be defined by common attributes. A suggested hierarchy of grouping criteria is provided below:

1. Style (please refer to the INREV Style classification paper, not manager defined)
2. Structure (open vs closed ended)
3. Strategy
4. Benchmarks
5. Leverage

For closed ended vehicles composite performance should preferably be defined by the combination of vintage year and one of the above mentioned attributes.

All vehicles (both historic and live) in a manager's track record must be included in a composite if a vehicle matches the grouping criteria. Where a vehicle matching the grouping criteria has been excluded from the composite, reasons for doing such is disclosed.

Calculation methodology

Time Weighted Return Composite performance should be calculated by weighting the performance of each participating vehicle or segregated account with its share of the total composite's size.

For closed ended vehicle composites a since inception IRR is presented. As cash flows of vehicles participating in the composite are all sharing common vintage year and attributes, aggregating cash flows do not constitute a problem.

To be added in Definitions

Name	Description
Contributions or Capital Calls	Any capital paid from the investor(s) into the vehicle. As described in Module 4 INREV NAV, capital can take various forms aside from equity – examples include shareholder loans and hybrid capital instruments such as convertible bonds. Some vehicles are structured via a combination of equity participations and shareholder loans. Shareholder loans and hybrid capital instruments are generally seen as part of the investors' overall interest in the vehicle. They should be included as a component of contributions from investors.
Vintage year	The year in which the date of the first Contribution or Capital Call occurs
Redemptions / Capital returned (from sales proceeds)	The return of an investor's equity holdings
Distributions / Dividend payment	Cash or other assets paid from the vehicle to its investors as a share of income from operations or gain on sale of investments.
Vehicle denominated currency	Currency determined in the vehicle documentation
Time Weighted Return (TWR)	The geometric average of the holding period yields to an investment portfolio. The formula isolates the performance of the investment by removing the timing effect of cash contributions and distributions from the investment's ending fair value and so measure how well a manager performed over the measurement period regardless of the size of the investment or timing of external cash flows.
Total return	The amount an investor earns over the stated period after all vehicle level fees and expenses including taxes and interests are deducted.
Distribution yield	The amount distributed in cash or dividend to investors in percentage of the NAV.
Internal Rate of Return (IRR)	This is the annualised implied discount rate (effective compounded nominal rate) that equates the present value of all of the cash inflows associated with an investment with the sum of the present value of all the cash outflows accruing from it and the present value of the unrealised residual portfolio.

Name	Description
Cumulative Distributions to Paid-in Capital multiple	This measures what portion of the return has actually been returned to the investors.
Total Value to Paid-in Capital Multiple	This provides information regarding the total net value of the investment as at a certain date, relative to capital invested.
Realised and unrealised SI-IRR	This provides investors with clarity as to how much of the return arises from the valuations.
Residual Value to Paid-in Capital Multiple	This provides a measure of how much of the return is unrealised.